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Basin Electric
Power Cooperative
Montana long
range plan

BASIN ELECTRIC POWER COOPERATIVE

Montana Long Range Plan
April 1, 1978

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BASIN ELECTRIC POWER COOPERATIVE

Montana Long Range Plan
April 1, 1978

BASIN ELECTRIC
POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA 58501
PHONE 701-223-0441 TWX 910-677-2342

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Thiessen
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Mont.

Clarence
Welander
Fullerton,
N.D.

Manager
James L.
Grahl

April 5, 1978

Mr. Ted Doney, Director
Department of Natural Resources
and Conservation
32 South Ewing
Helena, Montana 59601

Dear Mr. Doney:

Pursuant to the provisions of Section 70-814 of the Major Facility Siting Act, Basin Electric Power Cooperative hereby submits its 1978 long-range plan for the State of Montana.

Basin Electric is a regional wholesale power supplier for rural electric cooperatives in eight states: North and South Dakota, Montana, Wyoming, Nebraska, Iowa, Minnesota and Colorado. Central Montana Electric G&T Cooperative and Upper Missouri G&T Electric Cooperative are our two Class A members in Montana. These cooperatives provide electric service for nineteen Montana rural electric distribution cooperatives.

The President of the Board of Directors of Basin Electric Power Cooperative is Mr. C. R. Thiessen of Lambert, Montana, representing Upper Missouri G&T. J. William Keller, Custer, Montana, representing Central Montana G&T is also a member of our Board of Directors.

A power requirements study prepared by Basin Electric and based on load projections submitted by our member cooperatives forecasts that Montana cooperatives which are members of Upper Missouri G&T and Central Montana G&T will experience a 6.1% load growth each year for the years 1982 to 1987. This means their loads will grow from 246 MW in 1982 to 310 MW in 1987, an increase of 64 MW. It is apparent that the REC's in Montana have need for the development of wholesale electric power supply to meet the steadily expanding needs of their consumers.

Although the primary function of Basin Electric is to supply wholesale power to its members, the Cooperative has

always felt a strong sense of responsibility in other regards. From its beginning in 1962, Basin Electric has been a forerunner in seeking the alleviation of environmental and social impacts. It is worthwhile to note that, because the members of the Board of Directors of Basin Electric are themselves farmers and ranchers, they have recognized that electricity helps to achieve a better way of life for rural citizens of the state and region only if the improvement of social and economic conditions remains the cornerstone in the development of Basin Electric's policies.

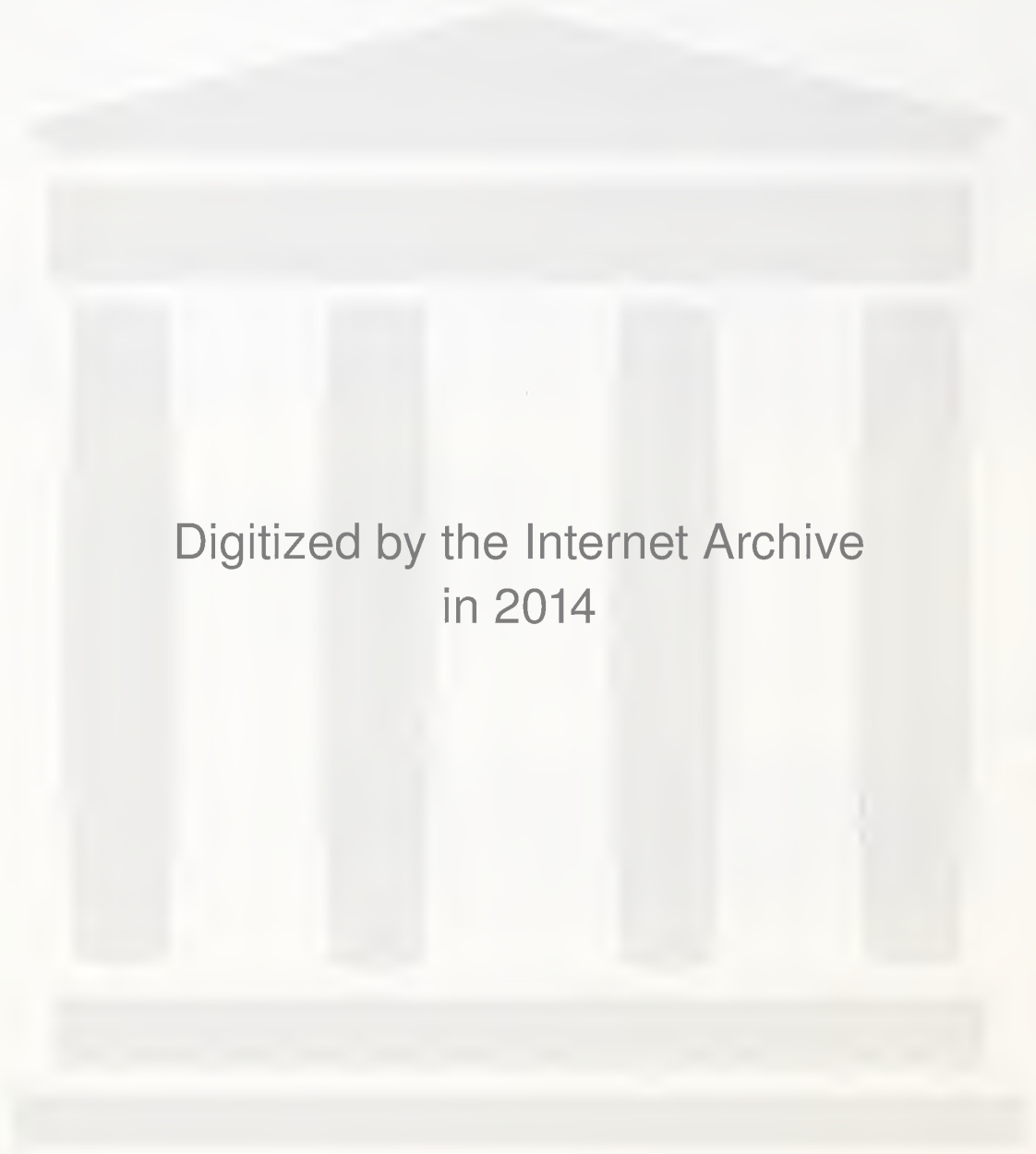
Basin Electric would like to extend an invitation to the staff of the Department of Natural Resources to visit our facilities in North Dakota. We also look forward to additional opportunities, as provided for in the Siting Act, to acquaint you with Basin Electric's activities and to appraise you of our plans for the future.

Sincerely,

James L. Grahl

jn
Enclosure

cc: C. R. Thiessen - Upper Missouri G&T
J. William Keller - Central Montana G&T
J. Follensbee - Central Montana G&T
B. Heit - Upper Missouri G&T



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INTRODUCTION

Basin Electric Power Cooperative is currently engaged in a preliminary siting study to identify potential alternative sites for mine-mouth or short-haul, two-unit generating plants utilizing Wyoming, Montana, or North Dakota coals (lignite). The architectural/engineering firm of Burns & McDonnell, Inc., Kansas City, Missouri, has been employed to conduct the siting study in collaboration with Basin Electric.

When the potential sites are identified, they will be evaluated in terms of ultimate generating capacity, fuel cost and fuel quality, cooling and make-up water requirements, socio-economic impacts, power transmission costs, environmental impacts, and other cost and environmental factors.

These evaluations will be performed to meet reconnaissance grade levels of accuracy.

The United States contains two major electrical transmission systems, an Eastern system and a Western system. Basin Electric's wholesale power supply obligations involve both systems. Due to the asynchronous nature of these systems, Basin Electric must plan separately for its east-side and west-side wholesale power supply loads.

Therefore, the siting study involves a search for two general siting areas, with the west-side study including area in north-eastern Montana.

The west-side site would have an ultimate capability of about 1000 MW and would service Basin Electric members Central Montana G&T, Upper Missouri G&T, plus some additional west-side loads in Wyoming and South Dakota.

The siting study began in the summer of 1977 and is scheduled for completion late in 1978. As of April 1, 1978, no west-side site has emerged as the optimum location. Therefore Basin Electric's response to certain informational requirements in the Montana long-range plan must be regarded as one of several possibilities in our search for a location for additional base-load generating capacity.

QUESTION 1

Filing Date For New Applications

Tentative application schedule:

(a) 1978 thru third quarter - No application
1978 fourth quarter - Application for water

(b) 1979 thru first half - No application
1979 thru second half - Application for a steam-electric power plant
1980 thru second half - No application

(c) 1981-1987 -- No applications

QUESTION 2

Description of Tentative Applications

The facility contemplated by the application is a lignite or coal fueled steam-electric generating plant with attendant transmission lines. The plant would be sized to produce approximately 440 megawatts of electric power. The facility would be located on a site which could ultimately accomodate the installation of a second unit. One general locality being considered is the northeastern quarter of Montana, McCone County and surrounding area.

Application for a steam electric power plant would include:

(a) The development of a cooling water supply intake, piping and treatment facilities using Missouri River water.

(b) The development of a mine to supply approximately 3 million tons of fuel per year.

(c) The construction of rail spurs and access roads as may be required.

(d) The construction of transmission line(s) with terminals to deliver the output of the units to the appropriate points of connection within the regional transmission grid.

(e) The development of housing and related service facilities agreements as may be required to accomodate construction workers and their families.

(f) The development of housing arrangements as may be required for permanent employees.

Construction would tentatively commence in 1982 and be completed in 1986.

QUESTION 3

Transmission Lines and Associated Facilities Construction Dates

Transmission lines and associated facilities which would be needed in connection with construction of a generating facility in Montana have not as yet been determined or identified. A tentative date of 1984 is given for commencement of transmission line and associated facility construction should a Montana site be selected.

QUESTION 4

Monthly Average Demand

The demand and energy projections for Basin Electric Power Cooperative's total loads in Montana are shown in Table A (page 5). These projections are based on the 1976 Power Requirement Study (PRS) - U.S. Department of Agriculture, Rural Electrification Administration Bulletin 120-1.

Table B (page 6) shows the load projections for the Montana deliveries of Upper Missouri G and T Electric Cooperative. Table C (page 7) shows the load projections for Central Montana Electric G and T Cooperative. The proposed facility would provide capacity and energy for these loads.

The map on page 8 shows the delivery points of Upper Missouri G & T. On page 9 is a map of Central Montana G&T delivery points.

TOTAL LOAD

TABLE A

DEMAND

YR.	JAN KW	FEB KW	MAR KW	APR KW	MAY KW	JUN KW	JUL KW	AUG KW	SEP KW	OCT KW	NOV KW	DEC KW	KWMONTH
77	211160.	192915.	170512.	171272.	141942.	123529.	123465.	131408.	121713.	138647.	151444.	194711.	1872718.
78	213060.	194651.	172046.	172813.	143219.	124640.	124576.	132808.	122808.	139895.	152806.	196463.	1889785.
79	214960.	196387.	173580.	174354.	144497.	125752.	125687.	133608.	123903.	141143.	154169.	198215.	1906255.
80	216960.	198214.	175195.	175976.	145841.	126922.	126857.	134408.	125056.	142456.	155603.	200059.	1923547.
81	231100.	211133.	186613.	187445.	155345.	135194.	135124.	143317.	133206.	151740.	165745.	213097.	2049059.
82	246400.	225111.	198968.	199855.	165630.	144145.	144070.	152720.	142025.	161786.	176718.	227206.	2184634.
83	262200.	239546.	211727.	212670.	176251.	153387.	153309.	162509.	151132.	172160.	188050.	241775.	2324716.
84	278500.	254437.	224889.	225892.	187207.	162923.	162839.	172545.	160528.	182863.	199740.	256805.	2469168.
85	295300.	269786.	238455.	239518.	198500.	172751.	172662.	182568.	170211.	193894.	211789.	272296.	2617730.
86	312517.	285516.	252357.	253483.	210074.	182823.	182728.	193487.	180134.	205199.	224137.	288172.	2770627.
87	330774.	302195.	267101.	268291.	222346.	193503.	193404.	204726.	190658.	217186.	237231.	305006.	2932421.
88	350121.	319870.	282722.	283983.	235351.	204821.	204716.	216616.	201810.	229889.	251107.	322847.	3103853.
89	370610.	338590.	299268.	300602.	249124.	216807.	216696.	230190.	213619.	243342.	265801.	341739.	3286388.
90	392300.	358405.	316782.	318195.	263704.	229496.	229378.	245283.	226122.	257584.	281358.	361740.	3480347.

ENERGY

YR.	JAN MWH	FEB MWH	MAR MWH	APR MWH	MAY MWH	JUN MWH	JUL MWH	AUG MWH	SEP MWH	OCT MWH	NOV MWH	DEC MWH	TOTALMWH
77	98181.	89739.	83959.	91299.	70195.	66157.	57624.	62693.	64689.	64138.	71663.	97538.	917875.
78	99335.	90794.	84946.	92373.	71020.	66935.	58301.	63537.	65450.	64893.	72505.	98686.	928775.
79	100585.	91936.	86014.	93535.	71913.	67776.	59035.	64155.	66273.	65709.	73417.	99926.	940274.
80	101902.	93140.	87140.	94760.	72855.	68664.	59809.	64782.	67140.	66569.	74378.	101236.	952375.
81	108805.	99450.	93043.	101173.	77790.	73315.	63859.	69242.	71688.	71079.	79416.	108093.	1016958.
82	116018.	106043.	99212.	107887.	82948.	78176.	68093.	73793.	76442.	75792.	84682.	115259.	1084345.
83	123444.	112830.	105562.	114792.	88256.	83181.	72451.	78514.	81335.	80643.	90103.	122637.	1153748.
84	131125.	119852.	112131.	121934.	93748.	88355.	76959.	83366.	86396.	85661.	95709.	130267.	1225503.
85	139049.	127093.	118906.	129302.	99414.	93695.	81610.	88215.	91617.	90837.	101493.	138139.	1299370.
86	147163.	134510.	125845.	136848.	105215.	99163.	86372.	93497.	96962.	96137.	107415.	146201.	1375328.
87	155773.	142379.	133208.	144854.	111370.	104964.	91425.	98936.	102635.	101761.	113700.	154754.	1455759.
88	164908.	150729.	141021.	153350.	117902.	111120.	96787.	104697.	108655.	107730.	120367.	163830.	1541096.
89	174510.	159505.	149230.	162277.	124766.	117590.	102421.	111233.	114980.	114002.	127375.	173367.	1631256.
90	184666.	168789.	157916.	171722.	132028.	124433.	108384.	118507.	121673.	120637.	134789.	183458.	1727002.

TOTAL BASIN ELECTRIC LOADS IN MONTANA

FINAL BASE LOAD

DEMAND

YR.	JAN KW	FEB KW	MAR KW	APR KW	MAY KW	JUN KW	JUL KW	AUG KW	SEP KW	OCT KW	NOV KW	DEC KW	KWMONTH
77	43700.	39924.	35288.	35445.	29375.	25565.	25551.	27700.	25189.	28693.	31342.	40296.	388068.
78	45600.	41660.	36822.	36986.	30652.	26676.	26662.	29100.	26284.	29941.	32704.	42048.	405135.
79	47500.	43396.	38356.	38527.	31930.	27788.	27773.	29900.	27379.	31189.	34067.	43800.	421605.
80	49500.	45223.	39971.	40149.	33274.	28958.	28943.	30700.	28532.	32502.	35501.	45644.	438897.
81	52000.	47507.	41990.	42177.	34954.	30420.	30404.	32400.	29973.	34143.	37294.	47949.	461211.
82	54700.	49974.	44170.	44367.	36769.	32000.	31983.	34000.	31529.	35916.	39231.	50439.	485078.
83	57600.	52623.	46512.	46719.	38719.	33696.	33679.	35800.	33201.	37820.	41311.	53113.	510793.
84	60600.	55364.	48935.	49153.	40735.	35451.	35433.	37600.	34930.	39790.	43462.	55879.	537332.
85	63800.	58288.	51519.	51748.	42886.	37323.	37304.	39200.	36774.	41891.	45757.	58830.	565320.
86	67100.	61303.	54183.	54425.	45105.	39254.	39233.	41500.	38676.	44058.	48124.	61873.	594834.
87	70600.	64500.	57010.	57264.	47457.	41301.	41280.	43600.	40694.	46356.	50634.	65100.	625796.
88	74300.	67880.	59997.	60265.	49944.	43466.	43443.	45800.	42827.	48785.	53288.	68512.	658507.
89	78200.	71444.	63147.	63428.	52566.	45747.	45724.	48100.	45074.	51346.	56085.	72108.	693969.
90	82300.	75189.	66457.	66754.	55322.	48146.	48121.	53300.	47438.	54038.	59026.	75889.	731980.

ENERGY

YR.	JAN MWH	FEB MWH	MAR MWH	APR MWH	MAY MWH	JUN MWH	JUL MWH	AUG MWH	SEP MWH	OCT MWH	NOV MWH	DEC MWH	TOTALMWH
77	19913.	18201.	17029.	18517.	14237.	13418.	11687.	12953.	13120.	13008.	14535.	19782.	186400.
78	21067.	19256.	18016.	19591.	15062.	14196.	12364.	13797.	13881.	13763.	15377.	20930.	197300.
79	22317.	20398.	19084.	20753.	15955.	15037.	13098.	14415.	14704.	14579.	16289.	22170.	208799.
80	23634.	21602.	20210.	21978.	16897.	15925.	13872.	15042.	15571.	15439.	17250.	23480.	220900.
81	24868.	22730.	21265.	23124.	17779.	16756.	14595.	15899.	16384.	16245.	18150.	24705.	232500.
82	26176.	23926.	22384.	24342.	18715.	17638.	15363.	16697.	17247.	17101.	19106.	26005.	244700.
83	27556.	25187.	23564.	25625.	19701.	18569.	16173.	17576.	18157.	18002.	20114.	27376.	257600.
84	29004.	26511.	24803.	26971.	20736.	19543.	17023.	18467.	19111.	18948.	21170.	28814.	271101.
85	30554.	27927.	26128.	28412.	21845.	20588.	17933.	19265.	20132.	19960.	22302.	30354.	285400.
86	32146.	29382.	27489.	29893.	22983.	21661.	18867.	20402.	21180.	21000.	23463.	31936.	300402.
87	33840.	30930.	28938.	31468.	24194.	22802.	19861.	21446.	22296.	22106.	24700.	33619.	316200.
88	35642.	32577.	30480.	33144.	25483.	24016.	20919.	22546.	23484.	23284.	26015.	35409.	332999.
89	37469.	34247.	32041.	34842.	26788.	25247.	21990.	24142.	24687.	24477.	27348.	37223.	350501.
90	39381.	35996.	33677.	36621.	28156.	26536.	23114.	26177.	25948.	25727.	28745.	39124.	369202.

Load Projections
Upper Missouri G and T Cooperative

FINAL BASE LOAD

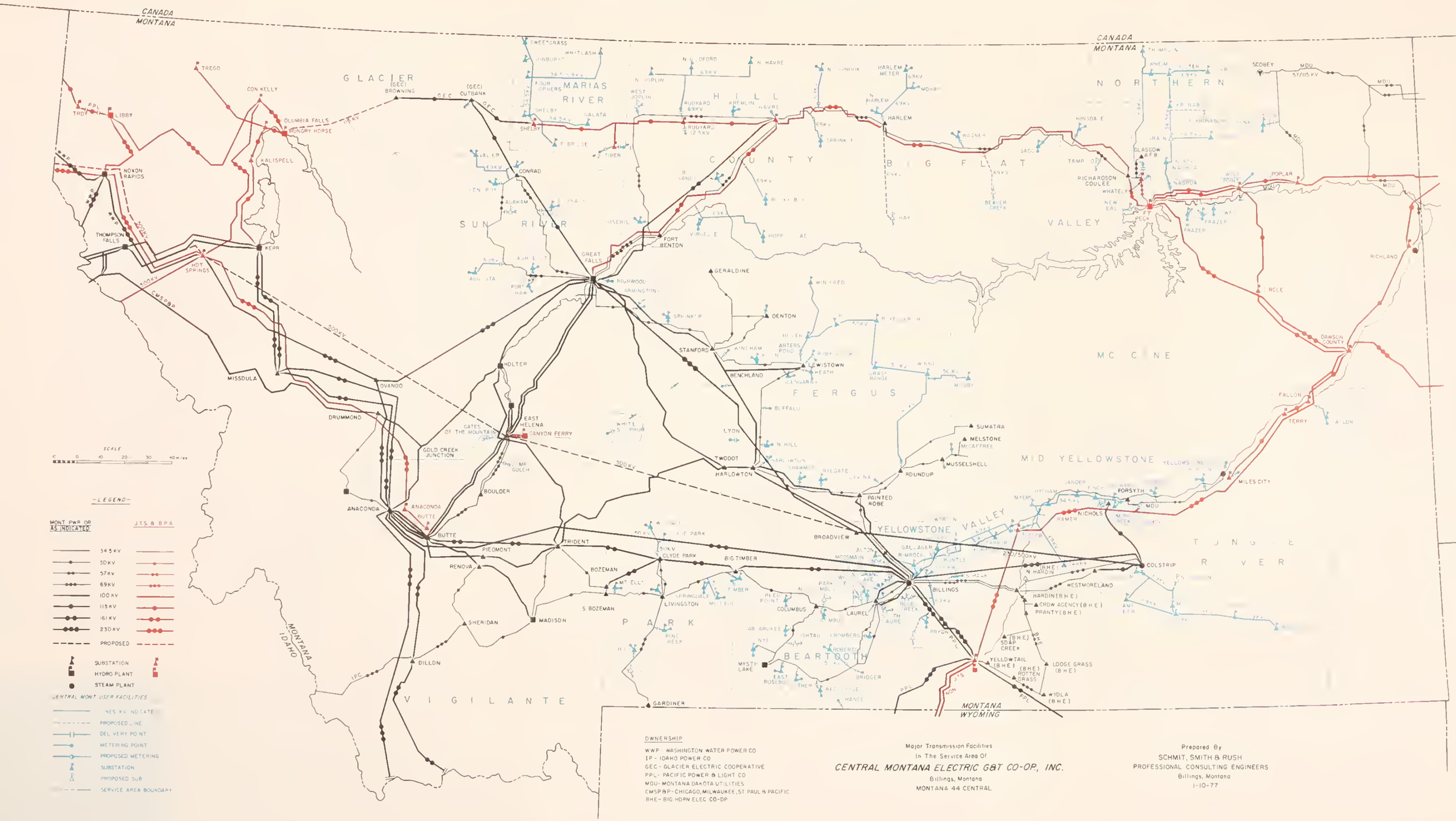
DEMAND

YR.	JAN KW	FEB KW	MAR KW	APR KW	MAY KW	JUN KW	JUL KW	AUG KW	SEP KW	OCT KW	NOV KW	DEC KW	KWMONTH
77	167460.	152991.	135224.	135827.	112567.	97964.	97914.	103708.	96524.	109954.	120102.	154415.	1484650.
78	167460.	152991.	135224.	135827.	112567.	97964.	97914.	103708.	96524.	109954.	120102.	154415.	1484650.
79	167460.	152991.	135224.	135827.	112567.	97964.	97914.	103708.	96524.	109954.	120102.	154415.	1484650.
80	167460.	152991.	135224.	135827.	112567.	97964.	97914.	103708.	96524.	109954.	120102.	154415.	1484650.
81	179100.	163626.	144623.	145268.	120391.	104774.	104720.	110917.	103233.	117597.	128451.	165148.	1587848.
82	191700.	175137.	154798.	155488.	128861.	112145.	112087.	118720.	110496.	125870.	137487.	176767.	1699556.
83	204600.	186923.	165215.	165951.	137532.	119691.	119630.	126709.	117931.	134340.	146739.	188662.	1813923.
84	217900.	199073.	175954.	176739.	146472.	127472.	127406.	134945.	125598.	143073.	156278.	200926.	1931836.
85	231500.	211498.	186936.	187770.	155614.	135428.	135358.	143368.	133437.	152003.	166032.	213466.	2052410.
86	245417.	224213.	198174.	199058.	164969.	143569.	143495.	151987.	141458.	161141.	176013.	226299.	2175793.
87	260174.	237695.	210091.	211027.	174889.	152202.	152124.	161126.	149964.	170830.	186597.	239906.	2306625.
88	275821.	251990.	222725.	223718.	185407.	161355.	161273.	170816.	158983.	181104.	197819.	254335.	2445346.
89	292410.	267146.	236121.	237174.	196558.	171060.	170972.	181090.	168545.	191996.	209716.	269631.	2592419.
90	310000.	283216.	250325.	251441.	208382.	181350.	181257.	191983.	178684.	203546.	222332.	285851.	2748367.

ENERGY

YR.	JAN MWH	FEB MWH	MAR MWH	APR MWH	MAY MWH	JUN MWH	JUL MWH	AUG MWH	SEP MWH	OCT MWH	NOV MWH	DEC MWH	TOTALMWH
77	78268.	71538.	66930.	72782.	55958.	52739.	45937.	49740.	51569.	51130.	57128.	77756.	731475.
78	78268.	71538.	66930.	72782.	55958.	52739.	45937.	49740.	51569.	51130.	57128.	77756.	731475.
79	78268.	71538.	66930.	72782.	55958.	52739.	45937.	49740.	51569.	51130.	57128.	77756.	731475.
80	78268.	71538.	66930.	72782.	55958.	52739.	45937.	49740.	51569.	51130.	57128.	77756.	731475.
81	83937.	76720.	71778.	78054.	60011.	56559.	49264.	53343.	55304.	54834.	61266.	83388.	784458.
82	89842.	82117.	76828.	83545.	64233.	60538.	52730.	57096.	59195.	58691.	65576.	89254.	839645.
83	95888.	87643.	81998.	89167.	68555.	64612.	56278.	60938.	63178.	62641.	69989.	95261.	896148.
84	102121.	93341.	87328.	94963.	73012.	68812.	59936.	64899.	67285.	66713.	74539.	101453.	954402.
85	108495.	99166.	92778.	100890.	77569.	73107.	63677.	68950.	71485.	70877.	79191.	107785.	1013970.
86	115017.	105128.	98356.	106955.	82232.	77502.	67505.	73095.	75782.	75137.	83952.	114265.	1074926.
87	121933.	111449.	104270.	113386.	87176.	82162.	71564.	77490.	80339.	79655.	89000.	121135.	1139559.
88	129266.	118152.	110541.	120206.	92419.	87104.	75868.	82151.	85171.	84446.	94352.	128421.	1208097.
89	137041.	125258.	117189.	127435.	97978.	92343.	80431.	87091.	90293.	89525.	100027.	136144.	1280755.
90	145285.	132793.	124239.	135101.	103872.	97897.	85270.	92330.	95725.	94910.	106044.	144334.	1357800.

CENTRAL MONTANA ELECTRIC G&T CONSUMERS

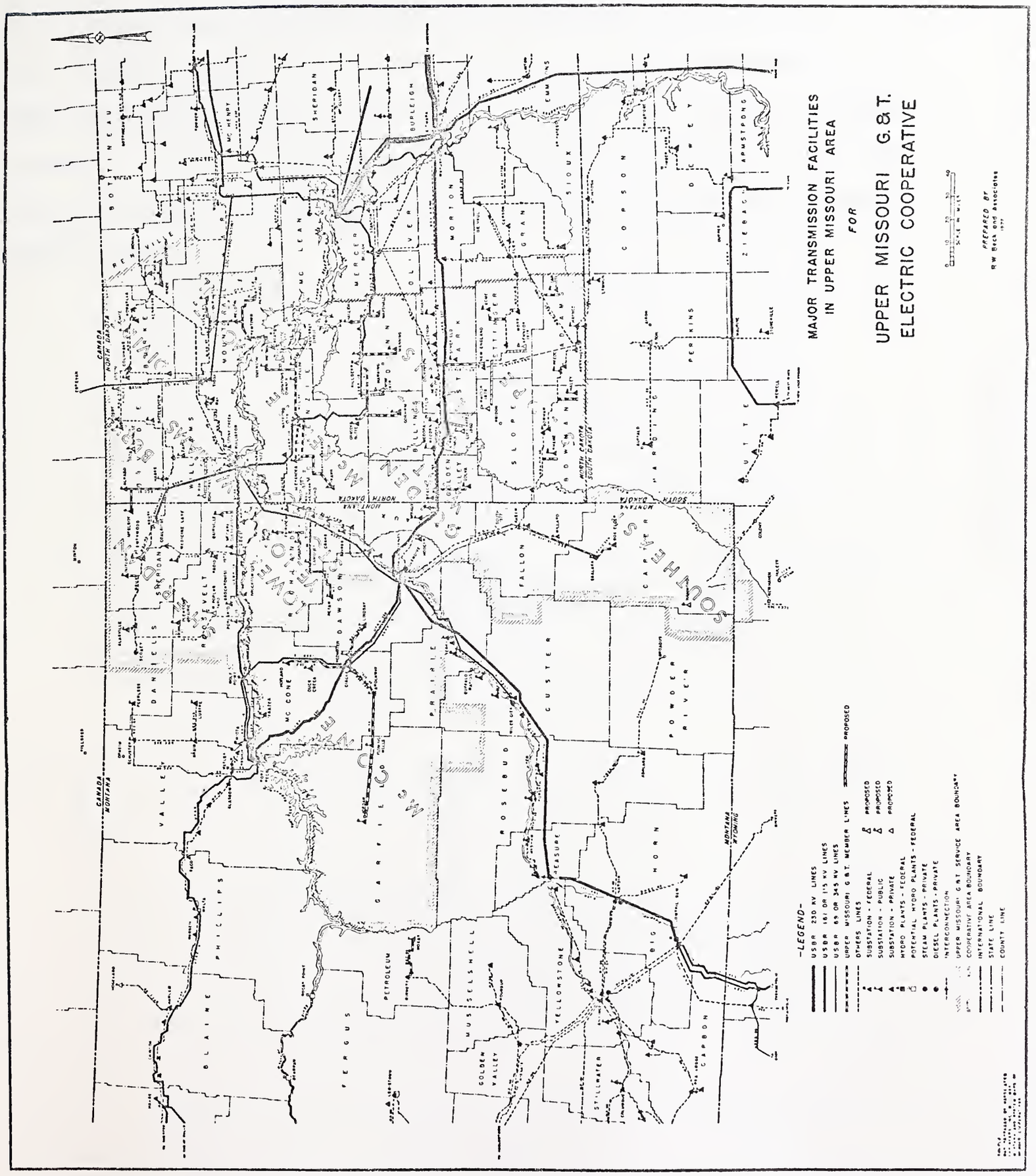


OWNERSHIP

WWP - WASHINGTON WATER POWER CO
IP - IDAHO POWER CO
GEC - GLACIER ELECTRIC COOPERATIVE
PPL - PACIFIC POWER & LIGHT CO
MDU - MONTANA DAKOTA UTILITIES
CMSP&P - CHICAGO, MILWAUKEE, ST PAUL & PACIFIC
BHE - BIG HORN ELEC CO-OP

Major Transmission Facilities
In The Service Area Of
CENTRAL MONTANA ELECTRIC G&T CO-OP, INC.
Billings, Montana
MONTANA 44 CENTRAL

Prepared By
SCHMIT, SMITH & RUSH
PROFESSIONAL CONSULTING ENGINEERS
Billings, Montana
1-10-77


MAJOR TRANSMISSION FACILITIES
IN UPPER MISSOURI AREA
FOR
UPPER MISSOURI G.&T.
ELECTRIC COOPERATIVE
PREPARED BY
R.W. Beck and Associates
1977
-LEGEND-
USBR 230 KV LINES
USBR 161 OR 115 KV LINES
USBR 69 OR 345 KV LINES
UPPER MISSOURI G&T MEMBER LINES
PROPOSED
OTHERS LINES
SUBSTATION - FEDERAL
PROPOSED
SUBSTATION - PUBLIC
PROPOSED
SUBSTATION - PRIVATE
PROPOSED
HYDRO PLANTS - FEDERAL
POTENTIAL HYDRO PLANTS - FEDERAL
STEAM PLANTS - PRIVATE
DIESEL PLANTS - PRIVATE
INTERCONNECTION
UPPER MISSOURI G&T SERVICE AREA BOUNDARY
COOPERATIVE AREA BOUNDARY
INTERNATIONAL BOUNDARY
STATE LINE
COUNTY LINE
CANADA
MONTANA
NORTH DAKOTA
SOUTH DAKOTA
WYOMING
BOTTINEAU
RENVILLE
WARD
MC HENRY
PIERCE
SHERIDAN
MC LEAN
MERCER
OLIVER
BURLEIGH
MORTON
GRANT
SIOUX
EMMONS
COPSON
DEWEY
ZIEBACH
ARMSTRONG
MOUNTRAIL
WILLIAMS
DIVIDE
BURKE
MC KENZIE
DUNN
GOLDEN VALLEY
BILLINGS
SLOPE
HARDING
PERKINS
BOWMAN
ADAMS
MEADE
BUTTE
PERSHING
ROOSEVELT
DANIELS
SHERIDAN
MC CONE
DUNN
DAWSON
FALLON
CARTER
SOUTHEY
VALLEY
PHILLIPS
GARFIELD
PRAIRIE
CUSTER
POWDER RIVER
ROSEBUD
TREASURE
FERGUS
PETROLEUM
MUSSELSHELL
YELLOWSTONE
BIG HORN
GOLDEN VALLEY
STILLWATER
CARBON

QUESTION 5

Energy Demand Projections

a) Does not apply to Basin Electric Power Cooperative.

b) Included on pages 11-18 are the "Instruction for the Preparation of Power Requirement Studies" provided in REA Bulletin 120-1. Projections given in Tables A, B and C are based on the power estimates arrived at in the 1976 PRS Study completed for the Upper Montana Electric and Central Montana Electric service areas.

INSTRUCTIONS FOR THE PREPARATION OF POWER REQUIREMENTS STUDIES

I. Introduction:

A. A Power Requirements Study (PRS) is the study of the specified area of a borrower or a group of borrowers for the purpose of determining:

1. Types and magnitudes of loads.
2. Estimates of future number of consumers by consumer classification, their future kWh consumption and the total power requirements.
3. Magnitude and season of peak kW demand.

B. The purposes of a PRS are to provide the basis for:

1. Construction work plans and for engineering and planning studies relating to the construction or extension of transmission and/or generating facilities to provide adequate power supply.
2. Engineering studies of the present distribution system and adequate design of the future system.
3. Present rate analyses and future rate studies.
4. Estimates of consumers, loads, kWh consumption, power requirements, which can be used to calculate revenues from the sale of electricity, and cost of purchased and/or generated power for financial forecasts and loan feasibility studies.

C. System load forecasting is an empirical process. Load projections are based on specific assumptions that will affect the accuracy of the study. Each borrower should consider its own special needs and requirements in developing or adopting a method for its own use. However, in the interest of consistency in methods and techniques to be used by borrowers in preparing a PRS, REA recommends, as a minimum, the procedures and guidelines outlined in these Instructions.

II. Basic Steps and Related Forms for Developing Power Requirement Studies: The preparation of Power Requirements Studies as outlined in this Bulletin is based on the following basic procedural steps and related functional forms.

A. Development of Historical Data on Load Growth

The effective development and analysis of accurate and complete data on load growth is an essential first step in the preparation of sound estimates of future power requirements and load characteristics. Generally, historical data for the last 11 years should be developed for this purpose. The following suggested forms (samples attached) are provided to facilitate the development of this required historical data.

1. Form 733a, Supply Substation Data, shows the yearly month-by-month historical data as to metered kW and kWh for each delivery point on the system, and is used for trending of total power requirements. The information is obtained from purchased power bills from each power supplier. Information

for each power supplier should be subtotaled and the subtotals should be totaled.

2. Demand curves, showing the total non-coincident kW peak for all delivery points in each month for the most recent three years should be prepared from data shown on Form 733a.

3. Form 342, Substation Summary, presents a yearly summary of the monthly information shown on Form 733a.

4. Form 156, Operating Data - Consumers and Usage, shows additional detailed historical data concerning number of consumers, by classification, and kWh usage which is required for the forecast part of the PRS. The basic data is obtained from Form 7, Financial and Statistical Report.

   For residential-town, residential-rural, commercial and industrial (50 kVA or less) and public buildings, the average number of consumers shown on this form is the total number of each billed for the 12 months divided by 12. The average monthly usage of these classifications is the total kWh for the 12 months divided by the total number of billed consumers for each of the 12 months.

   For residential-seasonal, irrigation, security lights, public street and highway lighting, and large commercial (over 50 kVA), show the average number of consumers as the largest number in any one of the 12 months of the year. For average usage of these classifications, use the total kWh billed for the year divided by the largest number of consumers in the respective classifications during any one month in the year -- average annual consumption per consumers.

5. Form 5, Annual Operating Data, shows a summary of energy purchases and sales and other historical data. It is used as a part of the basis for developing trends and making the forecasts of future power requirements. The data is derived from Forms 733a, 156, and 7. Other information shown on the form is easily calculated.

B. Mathematical Projections of Historical Data.

Borrowers who are members of power-type organizations, when revising a study which will be a part of the organization's study, should refer to part III-A, which assigns the responsibility for making mathematical projections, for the member, to the power organization. Other borrowers, upon completion of the historical load growth tabulation, should develop projections by calculating a curvilinear and/or logarithmic trend of the total energy as shown on the attached worksheets, Mathematical Trends of Power Use. Calculations of the trend should be based on historical kWh input to the system for the past 11 years immediately preceding the revision of the PRS as shown on Forms 733a, 156, and 5. Adjustments to the historical data may be necessary before mathematical projections are made because of abnormal increases or decreases.

C. Development of Final Power Requirements Forecasts

After developing total kW and kWh projections, the borrower will use the following forms, which require in-depth knowledge of the consumers and usage in the area, to develop its final forecast of power requirements.

1. Form 343, Irrigation Projection, is primarily a worksheet for use by systems with irrigation loads to develop the historical data and forecasts for such loads; it provides supporting detail for irrigation loads on Form 736. The historical data is derived partly from Form 7 and partly from the system's records of irrigation loads served. If necessary, the estimate portion of the form should be based upon a current Irrigation Study. A similar form may be used for oil well pumping, if required.

2. Form 345, Request for Individual Consumer Data, also supports Form 736 by showing the historical data for each large power load. Form 345 should be prepared for each large commercial consumer in excess of 350 kVA billing demand and for each wholesale consumer.

3. Worksheet for developing data and estimates of large commercial loads under 350 kVA and over 350 kVA. This form is used in connection with summarizing the data for large power loads, analyzing the Forms 345 and in arriving at estimates of future demands and energy consumption of the present and potential large power consumers.

4. Form 736, Comparative Annual Operating Data, is used to bring together data from Form 156, show average yearly growth in consumers and usage, by classification, for the past 10, five and two years, and is used to develop the forecast of consumers and their average monthly usage for the five and 10-year future period, and the average monthly usage for (1) the last 10 years, (2) the last five, and (3) the last two years. After the data is posted to this form and the averages are computed and entered, the forecast portion at the bottom of the form should be completed.

   The number of consumers, by classification, should be projected to the nearest number divisable by 5, except large commercial, irrigation, street lighting, borrower's own use and sales for resale. kWh usage should be projected to the nearest 10 to 600 kWh/month; nearest 20 between 600 and 1,000 kWh/month; and nearest 40 above 1,000 kWh/month.

   All annual kWh projections, except for irrigation, should be divisable by 12.

   Large commercial consumers (over 350 kVA) and sales for resale should be handled as follows:

   a. Tabulate data for each separate load and estimate them accordingly. Form 345 should be used as a basis for your estimate, modified by any justification for changing trends.

b. Subtract the total kWh shown on Form 345 from the total kWh usage for the large commercial class as shown on Form 156. Use the balance of the kWh to derive an average usage for the large commercials under 350 kVA and estimate them as a group. The growth of large commercials under 350 kVA, should be in line with recent historical growth unless a deviation can be justified.

c. Limit any named potential large commercials (over 350 kVA) to those that are known or are under contract. Unnamed large commercials should be included, if there is substantial evidence to justify their inclusion.

5. Form 802a, Standard System Loss Curve, is a tabular form of the guideline curve of REA Bulletin 45-4, "Distribution System Energy Losses", and is used in estimating future system losses.

6. Form 344, Estimate of System Losses, is used to estimate system losses for determining the total power requirements. Instructions for its preparation and the sources of material are shown on the form.

7. Forms 4 and 4a, Entire System Loads Estimates, are used to assemble data from the various other forms developed as indicated above. Information for the past calendar year on Form 4 is derived from Form 156; the projections are from the bottom of Form 736.

8. Forms 341 and 341a, Summary of Consumers and kWh Estimates and Large Commercial, are the completed forecast of number of consumers, by classification, the average kWh consumption and the estimates of the total power requirements for the five and 10-year future period. They are the summary of material developed in the other forms, most of which serve primarily as worksheets.

9. Narrative report should be prepared to fully document the assumptions and considerations used in developing the PRS. All factors which were considered in making the forecasts should be explained in detail. Any significant variations from historical trends should be explained.

10. Forms 341, 341a, and the narrative make up the formal PRS. A graph, on semi-logarithmic drawing paper, showing 11 years' historical data and the five and 10 future years' projection for the non-coincident system peak and the total power requirements (kWh), is also a part of the formal study (sample attached). These forms should be typed and assembled.

III. Procedures for Developing a PRS:

A. Power-Type Organizations and Their Member Distribution Systems

1. Power organization should inform its members and REA of the plans to initiate a revision, or the development, of the

PRS's and may request assistance of a Power Requirements Officer.

2. The Power Requirements Officer, coordinating with the Area Office field personnel as necessary, will work with the power organization and its member systems as required during the development of the PRS's.

3. Each member system prepares Forms 733a, 342, 156, and 5, and a demand curve (as described above) and forwards such copies, along with any preliminary information regarding abnormal increases or decreases in growth, to the power organization.

4. Power organization will furnish each of its member systems with a five and 10-year projection of the members' total energy purchases and total kW demand to be used by the member as a guide in developing its forecast. These projections should be developed by calculating a curvilinear and/or logarithmic trend of each member's total energy as shown on the attached worksheets, Mathematical Trends of Power Use. Calculation of the trends should be based on historical kWh input to the member systems for the past 11 years immediately preceding the revision of the PRS, as shown on Forms 733a, 156, and 5, furnished by each member.

   Adjustments to the historical data may be necessary because of abnormal increases or decreases. Similarly, using the historical data furnished by each member, the power organization will apply a load factor to the total energy projection to develop the projections of kW demand.

   Power organization forwards a projection of demand and energy for the five and 10-year future period so developed to each member system, together with any recommendations for the members' consideration in developing their forecasts.

5. After receipt of the total kW and kWh projections and recommendations from the power supplier, each member will use the following forms, which require in-depth knowledge of the consumers and usage in the area, to develop its Power Requirements Study: Forms 343, 345, worksheet for large commercials, 736, 802a, 344, 4 and 4a, 341 and 341a, and narrative report.

6. If the forecasts of total kW demand and energy projections completed by the member system do not agree with the projections or with other recommended considerations supplied by the power organization, the member and the power organization, assisted by the Power Requirements Officer, should discuss and resolve their differences. Once agreements are reached the member system should readjust its PRS if needed.

7. Forms 341, 341a, and the narrative make up the formal PRS. A graph, on semi-logarithmic drawing paper, showing 11 years' historical data and the five and 10 future years' projection for the non-coincident system peak and the total power requirements (kWh), is also a part of the formal study

(sample attached). These forms should be typed and assembled.

8. Each member should forward 12 copies of the formal PRS to the power organization. A copy of all back-up materials listed under the Instructions used to develop the study should also be forwarded.

9. The power organization, upon receipt and acceptance of the PRS reports from each of its member systems, should develop a consolidated PRS for its entire system, assisted by the Power Requirements Officer as required. The consolidated PRS and its report, as a minimum, consist of:

   a. A narrative report to include a discussion of assumptions, historical trends, deviations from those trends, diversities used and any information required to justify the estimates or to clarify any of the historical data or projections developed.

   b. Consolidated kW and kWh requirements estimates, extrapolating for the 15-year future period, or as long as may be required, using the same compound percent - growth projected in the previous five-year period, and including the member systems' estimates and all loads imposed upon the power organization system.

   c. Summary of individual non-beneficiary loads.

   d. Study of any loads served directly by the power organization.

   e. Summary of the consolidated PRS for all loads served, plus demand and energy losses.

   f. Three-year graph of month-by-month non-coincident system peak.

   g. Individual PRS for each member distribution system.

10. Upon clearance by the Power Requirements Officer, the power organization will forward six copies of its PRS and each member's PRS to REA for review and approval.

11. REA will review the PRS's and, if acceptable, indicate its approval to the power organization and each of its members.

12. The power organization and each member should then review the PRS with its board and obtain approval.

B. Individual Distribution Borrowers Not Members of Power-Type Organization

1. Distribution borrower will inform REA of its plans to initiate a revision of PRS and will request assistance of the Area Office field personnel.

2. Area Office field personnel will assist borrower in preparing and reviewing PRS as required.

3. The distribution borrower will develop a PRS for its system as follows:

organizations as members. REA will consider these special power supply organizations on a case-by-case basis and assist on request to develop procedures to obtain fully-coordinated PRS's in these circumstances.

QUESTION 6

Changes in Price and Rate Structures Effecting Demands

Basin Electric at this time is unable to provide an assessment of what effect changes in price and rate-structures would have upon demand.

QUESTION 7

Pooling, Interconnection, and Exchange Agreements

Basin Electric is currently involved in pooling, interconnection and exchange agreements with the following:

a) Mid-Continent Area Power Pool (MAPP) - located east of the east-west ties.

b) Missouri Basin Systems Group (MBSG) - a regional power planning coordinating organization for consumer-owned systems.

c) Inland Power Pool - located west of the east-west ties.

d) "Interconnection and Common Use Agreement" with Montana Dakota Utilities Company - providing for joint planning, construction and use of transmission/distribution facilities.

e) Basin Electric and its member cooperatives, Central Montana Electric and Upper Missouri Electric, are negotiating with the Montana Power Company for the purchase of a 100 megawatt share in the Colstrip Units 3 and 4 project.

f) Black Hills Power Company. (pages 21-26)

g) Nebraska Public Power District. (pages 27-34)

h) United Power Association. (page 37)

i) Western Area Power Administration (WAPA). (pages 38-39)

Contracts for items "a" thru "d" are contained in an exhibit book on file in the Energy Division of the Montana Department of Natural Resources and Conservation. Information on items "f" thru "i" follows.

For item "e" a letter of intent has not been executed to date with the Montana Power Company.

Contract for Electric Transmission Service between Black Hills Power and Light Company, Rushmore Electric Power Cooperative and Basin Electric Power Cooperative dated March 12, 1975

A) Nature of Obligations and Benefits:

This agreement provides for the construction of additional electric facilities needed by the parties to fulfill their respective utility responsibilities, to furnish transmission service for Rushmore for the term of the contract, and to provide for compensation to Black Hills.

This contract defines the contract path after the integration of delivery of electric power and energy by Black Hills for Rushmore to be from Stegall, Nebraska, to points of delivery of Black Hills' system to Rushmore South Dakota and Rushmore Wyoming. The integration of Black Hills' system into the interconnected western system allows alternative displacement paths of delivery in fulfillment of the defined contract path.

B) List of all Parties to the Agreement:

The agreement was executed between Black Hills Power and Light Company, Rushmore Electric Power Cooperative and Basin Electric Power Cooperative.

C) Time Period:

Within the meaning of this contract, the interim term is the period of time commencing at the time the Wyodak temporary sub-station is in operation and ending January 1, 1977. The term of this contract commenced May 19, 1975 and shall terminate 12:01 AM, May 1, 2007.

d) Amount of Electrical Energy:

The total delivery of power by Black Hills to Rushmore shall never

exceed 160,000 kilowatts of capacity without the mutual agreement of the parties regardless of the source of that power.

E) Specified Timing or Rate of Delivery or Receipt of Energy:

Energy adjustment during ultimate term: All energy, regardless of its source, to be delivered to Black Hills for delivery to Rushmore during the ultimate term, shall be adjusted for transmission and transformation losses under the following formula:

(1) Delivery at Wyodak with metering at 230,000 volts:

(a) During the period of time the Wyodak plant is in operation, the energy to be delivered to Black Hills shall equal the metered kilowatt hours times 1.02.

(b) During the time the Wyodak plant is not in operation, the energy to be delivered to Black Hills shall equal the metered kilowatt hours times 1.05.

(2) Delivery at Wyodak with metering at 69,000 volts:

(a) With the Wyodak plant in operation, the energy to be delivered to Black Hills shall equal (metered kilowatt hours times 1.01) times 1.02.

(b) With the Wyodak plant not in operation, the energy to be delivered to Black Hills shall equal (metered kilowatt hours times 1.01) times 1.05.

(3) For the purpose of the adjustment to be made in subparagraphs (1) and (2) in this section, the energy deemed to be delivered while the Wyodak plant is in operation shall be the same percentage of total kilowatt hours metered during a billing month as the percentage calculated by dividing the hours in the billing month during which the plant is in operation by the total hours in the billing month. The energy deemed to be delivered while the Wyodak plant is not in operation shall be

ther percentage of total kilowatt hours metered during a billing month as calculated by dividing the hours in the billing month during which the plant was not in operation by the total hours in the billing month.

(4) Where delivery of electric power and energy is delivered and metered at 230,000 volts at a location other than at Wyodak, the electric energy to be delivered to Black Hills shall equal the metered kilowatt hours times 1.05.

(5) Where electric power and energy is delivered at a location other than at Wyodak at 230,000 volts with metering at 69,000 volts, the electric energy to be delivered to Black Hills shall equal (the metered kilowatt hours times 1.01) times 1.05.

(6) Where the delivery of electric power and energy is at a place other than at Wyodak at 69,000 volts with metering at 69,000 volts, the electric energy to be delivered to Black Hills shall equal (the metered kilowatt hours times 1.01) times 1.07.

(7) Where electric power and energy is delivered by Black Hills at places other than Wyodak and at 69,000 volts, but with metering at a lower voltage, the electric energy to be delivered to Black Hills shall equal (metered kilowatt hours times 1.02) times 1.07.

F) Financial Agreements:

Compensation for transmission service for Rushmore's South Dakota members during interim term: Commencing with the date of this contract and continuing through the interim term of this contract, Rushmore shall pay Black Hills one mill per kilowatt hour adjusted

for losses delivered to Rushmore South Dakota as set forth in present contracts between Rushmore and Black Hills.

Compensation for transmission service to Rushmore Wyoming during interim term: No compensation shall be paid by Rushmore to Black Hills for delivery of electric power and energy to Rushmore Wyoming during the interim term of this contract.

Compensation to be paid by Basin Electric to Black Hills during ultimate term for transmission service to Rushmore South Dakota: During the utlimate term of this contract, Basin Electric shall pay to Black Hills one mill per kilowatt hour for all energy (regardless of source) delivered pursuant to this contract to Rushmore South Dakota (subject to loss adjustments herein provided) less the amount paid to Black Hills by the Bureau for the Bureau energy sold to Rushmore South Dakota and contractually delivered through Black Hills' system to Rushmore South Dakota.

Compensation to be paid by Basin Electric to Black Hills during ultimate term for Rushmore Wyoming transmission service: During the ultimate term of this contract, Basin Electric shall pay to Black Hills one mill per kilowatt hour for all energy associated with all of Rushmore Wyoming's load up to its first 150,000 kilowatts of demand (regardless of the energy's source, place of delivery, or who makes delivery); provided however, no compensation shall be paid Black Hills for energy delivered by the Bureau to Black Hills prior to January 1, 1986, for delivery to Rushmore Wyoming associated with a maximum demand of 4600 kilowatts. Compensation shall be adjusted for losses.

Compensation--Minimum payment: If the total amount to be paid by Basin Electric to Black Hills during any calendar year of the ultimate term of this contract is less than $500,000, Basin Electric

ultimate term. If, for any reason, during the term of this contract, Rushmore or Rushmore Wyoming should contract power and energy regardless of source over some other contractual transmission path without mutual agreement of the parties for a part of all of the first 150,000 kilowatts of capacity and associated energy required by Rushmore Wyoming, Basin Electric as compensation for the obligations of Black Hills undertaken in this contract, shall still be obligated to pay Black Hills the compensation as set forth herein as if all of Rushmore Wyoming's first 150,000 kilowatts of capacity and associated energy needs were being delivered under the provisions of this contract for the entire term.

Agreement for Transmission Service - Nebraska Public Power District and Basin Electric Executed June 16, 1977

A) Nature of Obligations and Benefits:

NPPD will accept delivery of electric power and energy for Basin Electric at various points of interconnection between NPPD and WAPA. NPPD will utilize its transmission system to wheel the Basin Electric power and energy to the Points of Delivery as follows:

No.	Name	Delivery Voltage
1.	Ogallala	115 kV
2.	Sidney	230 kV
3.	Scottsbluff	115 kV
4.	Paxton	115 kV
5.	Chadron	115 kV
6.	Stegall	230 kV
7.	Gordon	115 kV

B) List of all Parties to the Agreement:

The agreement for transmission service was executed between Nebraska Public Power District and Basin Electric Power Cooperative.

C) Time Period:

The agreement was executed June 16, 1977 and shall terminate with the commercial operating date of Laramie River Station Unit #2 (East Side Unit) but not later than March 24, 1981.

D) Amount of Electrical Energy:

The maximum obligation of NPPD under this agreement to deliver electric power and energy for and on behalf of Basin Electric to the Points of Delivery are as follows:

	POWER IN KILOWATTS	
Year	Summer Season	Winter Season
1977	130,000	-
1977/78	-	6,000
1978	167,000	-
1978/79	-	30,000
1979	216,000	-
1979/80	-	45,000
1980	193,000	-
1980/81	-	50,000

E) Specified Timing or Rate of Delivery or Receipt of Energy:

All electric power and energy accepted at the Points of Receipt will be transacted on a scheduled basis between the load control areas of NPPD and WAPA.

F) Financial Agreement:

The rate to be paid by Basin Electric for the delivery of the electric power over the NPPD transmission system is set forth in the attached Exhibit "A" - Transmission Service Rate Schedule.

NEBRASKA PUBLIC POWER DISTRICT

Schedule T-2 Issued November 25, 1975

Supersedes Schedule T-2 Issued November 3, 1975

Sheet No. 1 of 3 Sheets

TRANSMISSION SERVICE RATE SCHEDULE

(Name of Schedule)

SECTION 1. AVAILABILITY

This Rate Schedule is available to any Customer who is an electric utility and who contracts to use the interconnected transmission system of NPPD under the terms of an interconnection agreement for a term of not less than five (5) years in which the Customer agrees to maintain utility responsibility for its own load and in which NPPD grants a license to Customer to wheel electric power and energy of such Customer from the Point of Receipt over the NPPD transmission system to the Point of Delivery as specified in the contract.

Where the Customer's contract provides for rates to be applied and billed separately with respect to individual members, each member shall be referred to as a Customer in this schedule.

SECTION 2. SERVICE TO BE PROVIDED

The service to be provided hereunder includes a grant of license to wheel electric power and energy of Customer over the NPPD interconnected high voltage transmission system network consisting of transmission line and substation facilities rated 115,000 volts and above, owned, leased or operated by NPPD and including transmission line and substation facilities rated 69,000 volts and below (hereinafter called "Subtransmission") owned, leased or operated by NPPD. Electric power and energy may be received from Customer at 115,000 volts or at such higher voltage as may be agreed upon at the Point of Receipt for delivery by NPPD at the Point of Delivery located at (i) the low voltage bus (hereinafter called "Bus A") at the first transformation below 115,000 volts (generally 69,000 volts or 34,500 volts) and (ii) if specified in the contract, at other points and other voltages on the Subtransmission system.

NPPD shall be under no obligation to deliver electric power and energy at the Point of Delivery in amounts in excess of that received by NPPD from Customer at Point of Receipt, adjusted for transmission losses. Neither shall NPPD be under obligation to provide any Point of Receipt or Point of Delivery other than at established substations on its interconnected transmission system except as provided for under appropriate contract terms.

SECTION 3. MONTHLY RATE

Demand Charge

(1) Bus A deliveries to Customer
$0.96 per kilowatt applied to that portion of the Billing Demand determined in Section 7 (b) (1)

(2) Subtransmission deliveries to Customer
* per kilowatt applied to that portion of the Billing Demand determined in Section 7 (b) (2)

TAX CLAUSE: In the event of the imposition of any new or increased tax or any payment in lieu thereof, in excess of that provided for under Article VIII, Section 10 of the Nebraska Constitution, by any lawful authority on the production, transmission, or sale of electricity, the rate provided herein may be increased to reflect the amount of such tax or in lieu of tax increase.

Effective With first full billing period after December 31, 1975

Approved BOARD OF DIRECTORS 10-30-75

Issued by John S. McCarty

Schedule T-2 Issued November 25, 1975

Supersedes Schedule T-2 Issued November 3, 1975

Sheet No. 2* of 3 Sheets

TRANSMISSION SERVICE RATE SCHEDULE

(Name of Schedule)

SECTION 4. TRANSFORMATION CREDIT

(a) Where the Customer has provided all or a portion of the substation capacity required for service hereunder at the Point of Delivery from the high voltage transmission network of NPPD or from the Subtransmission facilities of NPPD thus relieving NPPD of the cost of providing such substation capacity, a credit shall be given to the Customer each month as follows:

(i) $0.30 per kilowatt for each kilowatt that the Customer's total Billing Demand in any month exceeds 0.75 times the nameplate rating in KVA of the aggregate transformer capacity furnished by NPPD for service hereunder to said Customer from the high voltage transmission network of NPPD.

(ii) $0.33 per kilowatt for each kilowatt that the Customer's total Billing Demand in any month exceeds 0.75 times the nameplate rating in KVA of the aggregate transformer capacity furnished by NPPD for service hereunder to said Customer from the Subtransmission facilities of NPPD.

(b) Where the Customer has provided transformation facilities at a Point of Delivery for service hereunder, power delivered at the Point of Delivery shall for billing purposes be measured on the high voltage side of the transformation facilities furnished by the Customer. In the event such power is measured on the low voltage side of the Customer's transformation facilities, the measured quantities of power shall be increased by 2.0%.

SECTION 5. CONTROL POWER CREDIT

Where the Customer has (1) adequate transmission and interconnection facilities, (2) generating capacity internal to its system which is sufficient to meet its generation reserve requirements, (3) adequate control facilities including (a) interconnection control, (b) generation control, (c) system area control, and (4) properly trained and skilled operating personnel, all of which are acceptable to NPPD thus establishing a net interchange control area totally encompassed by the control area of NPPD, a credit of $0.055 per kilowatt of Billing Demand shall be given to the Customer each month.

SECTION 6. TRANSMISSION LOSSES

Power and energy losses associated with transmission over the interconnected transmission system from the Point of Receipt to the Point of Delivery shall be determined as provided for in the contract of which this Rate Schedule is a part and such losses shall be supplied by Customer to NPPD at the Point of Receipt.

TAX CLAUSE: In the event of the imposition of any new or increased tax or any payment in lieu thereof, in excess of that provided for under Article VIII, Section 10 of the Nebraska Constitution, by any lawful authority on the production, transmission, or sale of electricity, the rate provided herein may be increased to reflect the amount of such tax or in lieu of tax increase.

Correction of mathematical error in Section 4 - November 25, 1975

Effective With first full billing period after December 31, 1975

Approved BOARD OF DIRECTORS 10-30-75

Issued by John S. McCarthy

Schedule T-2 Issued November 25, 1975

Supersedes Schedule T-2 Issued November 3, 1975

Sheet No. 3 of 3 Sheets

TRANSMISSION SERVICE RATE SCHEDULE

(Name of Schedule)

SECTION 7. BILLING DEMAND

(a) Billing Demand of Customer shall be the higher of (i) or (ii) below after adjustment as provided in Sections 6 and 9 in this Rate Schedule.

(i) the number of kilowatts determined under the provisions of the contract in which this Rate Schedule is incorporated.

(ii) the highest Measured Demand at each Point of Delivery occurring during the current Billing Period or the preceding eleven months including, for this purpose, the historical period prior to the date on which a Customer commences to take wheeling service under this Rate Schedule, adjusted to eliminate all classes of power not subject to this Rate Schedule and further adjusted as provided under subsection 4 (b).

(b) Where necessary, the Billing Demand determined under 7 (a) above shall be apportioned between
(1) deliveries made to Customer at Bus A
(2) Subtransmission deliveries to Customer.

SECTION 8. RATE ADJUSTMENT

This Rate Schedule shall be subject to such adjustment as may be made in accordance with the provisions of the contract of which this is a part.

SECTION 9. POWER FACTOR ADJUSTMENT

If Customer's power factor at any Point of Delivery at time of maximum Demand is less than ninety percent (90%), NPPD may, at its option, adjust such Demand for such Point of Delivery to ninety percent (90%) of the maximum KVA.

SECTION 10. GENERAL TERMS AND CONDITIONS

The general terms and conditions established at the time of the adoption of the rate tariff shall apply to this Rate Schedule, to the extent applicable.

TAX CLAUSE: In the event of the imposition of any new or increased tax or any payment in lieu thereof, in excess of that provided for under Article VIII, Section 10 of the Nebraska Constitution, by any lawful authority on the production, transmission, or sale of electricity, the rate provided herein may be increased to reflect the amount of such tax or in lieu of tax increase.

Effective With first full billing period after December 31, 1975

Approved BOARD OF DIRECTORS 10-30-75

Issued by

Transmission Service Contract between Nebraska Public Power District and Basin Electric Executed April 29, 1977

A) Nature of Obligations and Benefits:

The District shall transmit through its Bulk Transmission System, power for Basin Electric in the amount of 500 MW from the east side unit of the Laramie River Station. Basin Electric will provide a contribution in aid of construction for this transmission of power.

B) List of all Parties to the Agreement:

Basin Electric, acting as Project Manager and Operating Agent for the Missouri Basin Power Project and on its own behalf, and as agent for the participants of the Project, namely Basin Electric Power Cooperative, Bismarck, North Dakota; City of Lincoln, Nebraska; Heartland Consumers Power District, Madison, South Dakota; Western Minnesota Municipal Power Agency, Ortonville, Minnesota; Tri-State Generation and Transmission Association, Inc., Denver, Colorado; and the Wyoming Municipal Power Agency, Lusk, Wyoming; (all six together herein referred to as "Participant"), have entered into this agreement with Nebraska Public Power District.

C) Time Period:

This contract was executed April 29, 1977 and shall continue in force until December 31, 2040.

D) Amount of Electrical Energy:

The District will receive power for Basin Electric in the amount of 500 MW. If the net capability of the east side unit is in excess of 500 MW, the District agrees to receive such net capability, but in no event shall the amount of power exceed 550 MW.

E) Specified Timing or Rate of Delivery or Receipt of Energy:

The District's obligation to transmit power shall commence September 1, 1980. The delivery of power by the District to the Points of

Delivery shall be limited to the amount specified in the "Points of Delivery" indicated on page 34.

F) Financial Agreement:

In recognition of the long-term nature of this contract, Basin Electric has agreed to pay a contribution in aid of construction for bulk transmission service which is estimated at $51,591,700. This contribution shall be deemed a credit against the charges for the annual cost of the bulk transmission service.

Transmission Service Contract Between
Nebraska Public Power District and Basin Electric Power Cooperative

POINTS OF DELIVERY

One Point of Delivery shall be comprised of the points of interconnection between Nebraska Public Power District and Joint Transmission System for delivery of up to 300 MW*, less losses, to Heartland Consumers Power District, Basin Electric Power Cooperative, and Western Minnesota Municipal Power Agency:

1. At Hinton, Iowa, where the District's 230 kV Hinton - Twin Church transmission line connects to the USBR Sioux City (Hinton) substation 230 kV bus.
2. At Belden, Nebraska, where the USBR 115 kV Gavins Point - Belden transmission line connects to the District's Belden substation 115 kV bus.
3. At Gavins Point Substation, South Dakota, where the District's 115 kV Gavins Point - Neligh transmission line connects to the USBR Gavins Point substation 115 kV bus.
4. At O'Neill, Nebraska, where the USBR 115 kV Ft. Randall - O'Neill transmission line connects to the District's O'Neill substation 115 kV bus.
5. At Mission, South Dakota, where the District's 115 kV Mission - Valentine transmission line connects to the USBR Mission substation 115 kV bus.
6. At Ft. Randall substation, South Dakota, where the District's 230 kV Ft. Randall - Columbus transmission line connects to the USBR Ft. Randall substation 230 kV bus.

*Subject to pro rata adjustment based on Article II.

Electric Service Agreement between Basin Electric and United Power Association dated January 10, 1968

A) Nature of Obligations and Benefits:

This agreement allows Basin Electric and UPA to derive additional benefits from the interconnection of their systems by the purchase, sale or interchange of various classes of power and energy. These include: Breakdown on Emergency Service, Start-up and Maintenance Energy Service, Interchange of Energy, General Purpose Energy, and Temporary Firm Power.

B) List of all the Parties to Agreement:

The Electric Service Agreement was executed between Basin Electric Power Cooperative and United Power Association.

C) Time Period:

The Agreement was executed January 10, 1968 and shall continue in effect until September 24, 1986.

D) Amount of Electrical Energy:

All deliveries of power and energy by either party are scheduled in advance, emergencies expected.

E) Specified Timing or Rate of Delivery or Receipt of the Energy:

Each class of power and energy is scheduled according to the needs of day-to-day operation.

F) Financial Agreements:

Each class of service scheduled shall be itemized and accounted for separately. Breakdown on Emergency Service shall be either:

(1) by mutual agreement, returned to the supplier kilowatt hour for kilowatt hour under substantially similar load conditions as when delivered, as scheduled pursuant to Paragraph 1.03, or

(2) paid for at the rate of four mills ($0.004) per kilowatt hour.

Start-up maintenance energy service shall be delivered at the rate of four mills ($0.004) per kilowatt hour.

Interchange of energy delivered shall be returned kilowatt hour for kilowatt hour at existing points of interconnection at times and rates scheduled. For settlement purposes, interchange energy has a net value of three mills ($0.003) per kilowatt hour.

General purpose energy shall be at a rate of three mills ($0.003) per kilowatt hour.

Temporary firm power will be negotiated at the time of purchase.

Interconnection Agreement between Basin Electric and United Power Association dated September 24, 1966

A) Nature of Obligations and Benefits:

Basin Electric and UPA expect benefits through the interconnection of their respective systems by operating in a manner set forth in the agreement. UPA and Basin Electric provide their respective 230 kV substation facilities required to terminate their interconnecting facilities.

B) List of all Parties to the Agreement:

The Interconnection Agreement was executed between UPA and Basin Electric.

C) Time Period:

The agreement was executed September 24, 1966 and shall continue in effect for a period of 20 years.

D) Amount of Electrical Energy:

(1) The parties agree to normally operate their steam electric generating plants in the vicinity of Stanton, North Dakota, interconnected. As a result of such interconnected operation, there may be inadvertent flows of power and energy from the system of one party through the system of the other party.

E) Specified Timing or Rate of Delivery or Receipt of the Energy:

Each party agrees that during such periods of inadvertent flow, the input of electric power and energy into the other party's system shall at all times be approximately equal to the amount of electric power and energy withdrawn therefrom.

F) Financial Agreements:

Any unintentional delivery of power and energy by either party to the other shall be returned and balanced out as soon as practicable in accordance with procedures established by the Operating Committee.

Joint Transmission System and Mutual Services Contract between Basin Electric and the U.S. Bureau of Reclamation -- Western Area Power Administration (WAPA)

A) Nature of Obligations and Benefits:

This agreement provides the following:

(1) The establishment of a "Missouri Basin Systems Group Pooling Agreement". The MBSG makes engineering studies concerning the location, size, time of installation of thermal generating facilities for the purpose of coordinating such installations for the maximum benefit of all the participating systems. The MBSG also conducts annual operational studies to determine if the Joint Transmission System is adequate to carry the power requirements of the MBSG for the following three years.

(2) The establishment of a "Joint Transmission System" which is composed of certain high voltage transmission lines and associated substations. The JTS provides a transmission grid for members of the MBSG so they can receive power and energy generated at the hydroelectric generating plants of the USBR or by electric generating facilities in the area constructed and operated by other parties of the MBSG. At the present time, Basin Electric has the rights to deliver about 1,000,000 kW to our members over the JTS.

(3) Provides for the sale of peaking power to Basin Electric from the hydroelectric generating resource of the USBR.

(4) Provides for 179 MW operating reserves for Basin Electric's Leland Olds Units No. 1 and 2 from the hydroelectric generating resources of the USBR.

B) List of all parties to agreement:

The contract was executed between Basin Electric Power Cooperative and the U.S. Bureau of Reclamation.

C) Time Period:

The Agreement was executed November 29, 1962 and shall continue in effect until December 31, 2001. Supplements 1,2,4,5,6 and 7 are in effect until December 31, 2001.

D) Amount of Electrical Energy: Supplement No. 3

The USBR is obligated under Supplement 3 to provide 280 MW of firm peaking power for each winter season from 1978/79 until December 31, 1989.

E) Specified Timing or Rate of Delivery of the Energy:

All deliveries of peaking power during the winter season shall commence with the November billing period and terminate with the April billing period.

F) Basin Electric currently pays the WAPA approximately $8.62 per kw/yr for capacity in the Joint Transmission System for power generated and delivered from Basin Electric's resources for Leland Olds #2 and other resources, and $6.59 per kw/year for capacity rights in the JTS for Leland Olds #1. Basin Electric is currently paying the USBR $7.20 per kw/season for the 280 MW of firm winter peaking power and must return the energy to the USBR at mutually agreeable times.